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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,229	03/10/2004	Jeffrey Kao	SIS.0171US (PE-25669-AM)	2976
21906	7590	03/03/2006	EXAMINER	
TROP PRUNER & HU, PC 8554 KATY FREEWAY SUITE 100 HOUSTON, TX 77024			PREVIL, DANIEL	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,229

Applicant(s)

KAO, JEFFREY

Examiner

Daniel Previl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to communication filed on December 19, 2005.

Claim Objections

1. Claims 1-4 are objected to because of the following informalities: Claims 1, 3, the phrase "adapted to, capable of" is not a positive limitation but only required the ability to so perform. Appropriate correction is required.

Claims 2, 4, are objected for the same reason since they depend from objected claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, are rejected under 35 U.S.C. 102(e) as being anticipated by Ford et al. (US 6,515,857).

Regarding claim 1, Ford discloses a heat sink connected to an electronic device for dissipating heat generated therefrom (col. 5, lines 41-44), heat sink comprising a heat dissipating body having a visible outer surface and a thermochromic dye coated on visible outer surface of heat dissipating body (col. 5, lines

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41-67; col. 6, lines 23-37), thermo-chromic dye being capable of changing color in response to temperature change of heat dissipating body (col. 5, lines 44-57).

Regarding claim 3, Ford discloses a power supply (fig. 1) comprising a housing having a visible outer surface and a thermo-chromic dye coated on visible outer surface of housing (fig. 1; col. 5, lines 40-67), thermo-chromic dye being capable of changing color in response to temperature change of housing (col. 5, lines 44-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford (US 6,515,857).

Regarding claim 2, Although, Ford discloses all the limitations in claim 1, but fails to specify that thermo-chromic dye changes color from transparent to red when temperature of heat dissipating body changes from 40 degree C to 80 degree C. Since Ford discloses heat exchange material changes its appearance during operation as temperature varies (col. 5, lines 45-47). So, it would have been obvious to any skill artisan to be precise by mentioning the color changed as transparent to red or by mentioning the heat dissipating from 40 degree C to

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80 degree C in order to warn the user if the computer is overheating thereby preventing injury as taught by Ford (col. 5, lines 55-56).

Regarding claim 4, Although, Ford discloses all the limitations in claim 1, but fails to specify that thermo-chromic dye changes color from transparent to red when temperature of heat dissipating body changes from 50 degree C to 70 degree C. Since Ford discloses heat exchange material changes its appearance during operation as temperature varies (col. 5, lines 45-47). So, it would have been obvious to any skill artisan to be precise by mentioning the color changed as transparent to red or by mentioning the heat dissipating from 50 degree C to 70 degree C in order to warn the user if the computer is overheating thereby preventing injury as taught by Ford (col. 5, lines 55-56).

Response to Arguments

6. Applicant's arguments filed on December 19, 2005 have been fully considered but they are not persuasive.

According to Applicant's argument on page 3 regarding the phrase "capable of". It has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 60 USPQ 138.

According to Applicant's argument on pages 3-4, "Ford does not disclose change color in response to temperature of the heat sink". The examiner respectfully

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disagrees with the Applicant because Ford clearly discloses that heat sink 50 changes its appearance during operation as temperature varies (col. 5, lines 44-47).

The limitation "gradually change" mentioning by Applicant on page 3 is moot because it is not in the claim.

Regarding the obviousness rejection in claims 2 and 4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to be precise by mentioning from 40 degree C to 80 degree C. It has been held that discovering a value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The examiner examines the claims not the specification. The limitation "gradually change" in which the Applicant relies on is not stated in the claims. It is the claims that define the claimed invention not the specifications that are anticipated or unpatentable. Constant v. Advanced Micro-Devices Inc., 7 USPQ2d 1064.

For at least the above reason, the rejection of claims 1-4 is sustained.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hu et al. (US 6,146,031) discloses method and apparatus for controlling a thermal printer head.

Conner (US 5,985,381) discloses methods for increasing a camouflaging effect and articles so produced.

Hojyo (US 5,559,364) discloses a lead frame.

Bailey et al. (US 5,751,316) discloses a thermal ink jet print head with ink resistant heat sink coating.

Gottlich et al. (US 5,932,869) discloses promotional system with magnetic stripe and visual thermo-reversible print surfaced medium.

Nakagawa et al. (US 5,502,967) discloses color variation inducing device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Previl whose telephone number is (571) 272-

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2971. The examiner can normally be reached on Monday-Thursday. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Previl
Examiner
Art Unit 2636

DP
February 21, 2006.



JEFFERY HOFSSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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